

EPA SO2 Attainment Guidance Uses Contested Focus On Modeling Data

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EPA has quietly-issued guidance saying that states should use a combination of emissions monitoring and modeling to determine whether they are in attainment or nonattainment with the agency's strict sulfur dioxide (SO₂) air standard, even as states and industry say that relying on modeling could overestimate nonattainment problems.

The guidance dated March 24 comes as critics of the agency's reliance on modeling in designating attainment areas for the SO₂ standard are pursuing various legal challenges against EPA. An existing lawsuit challenges the SO₂ standard, with a key argument being the reliance on modeling to determine attainment areas. Industry is also suing over EPA's recent decision to deny an administrative petition asking the agency to reconsider the standard.

When EPA issued its new one-hour SO₂ national ambient air quality standard (NAAQS) of 75 parts per billion (ppb) in June 2010, the agency said it would rely partly on modeling data to designate attainment areas.

EPA's approach is key because being in nonattainment requires states to craft state implementation plans -- air quality blueprints for attaining NAAQS that typically include strict, expensive pollution controls for industries in such areas. States submit suggested attainment designations to EPA, but the agency has the final say.

Critics say the language of EPA's final rule setting the standard effectively mandates states to use emissions modeling rather than monitoring data in making recommendations to EPA on which areas the agency should designate as in or out of attainment, which the critics say will overestimate the number of nonattainment areas.

In the new guidance, EPA says that it does not expect states to provide "modeling information along with their initial designation recommendations," required to be submitted to EPA this summer, but it is only a temporary reprieve from using such data.

The agency "anticipates taking an analytic approach that uses both air quality monitoring and modeling information for designations," according to the guidance. EPA does not deem it "realistic or appropriate to expect states to complete modeling for all significant sources of SO₂ and assess the results in time" for the attainment designations that under the Clean Air Act must be submitted to the agency no later than June 3, according to the guidance.

"Therefore, we do not generally expect states to provide refined dispersion modeling information along with their initial designation recommendations. However, EPA does intend to consider, as appropriate, available air quality monitoring and modeling information submitted by states or tribes in support of their recommendations." EPA's stance is likely to prompt concern from observers who question using modeling in attainment designations.

EPA says that the difficulties states face in performing adequate modeling by June 3, combined with a limited network of SO₂ monitors, means that in June the agency might have to designate most areas of the United States as "unclassifiable" for the purposes of being in or out of attainment with the stricter NAAQS.

While noting that dispersion modeling "could be used in these initial designations to a limited degree (as could monitoring)," EPA says dispersion modeling "would likely be used to a larger extent subsequently as the basis for re-designation of nonattainment and unclassifiable areas to attainment."

In the guidance, EPA defines nonattainment as "an area where monitoring data or an appropriate modeling analysis indicate a violation," with nonattainment defined as "an area that has no monitored violations and which has an appropriate modeling analysis, if needed, and any other relevant information demonstrating no violations."

An unclassifiable area, the guidance states, would be one "that has no monitored violations and lacks an appropriate modeling analysis, if needed, or other appropriate information sufficient to support an alternate designation."

One state official says the guidance "recognizes that there's some opposition to the use of modeling, but doesn't totally satisfy that concern." Allowing states to submit their designations without modeling data but continuing to expect that states use modeling at some point will not quell states' concerns, the source says.

The source reiterates concerns raised by many that modeling is not a "proper" method for making NAAQS attainment designations. "Designations should be based on monitoring, period," the source says.

Support For Modeling

States could potentially offer some support for modeling if EPA only used it to help determine the placement of new SO₂ monitors to build a more robust SO₂ monitoring network, with the expectation that the data generated by that new network would be the basis for attainment designations. But the source says that is not the situation with the SO₂ standard, and EPA could rely to a significant degree on modeling in making its designations.

EPA's planned reliance on modeling to help it make attainment designations for the SO₂ NAAQS is already being challenged in litigation filed by states and industry in the U.S. Court of Appeals for the District of Columbia Circuit. In that litigation, *Montana Sulphur & Chemical Company v. EPA*, *North Dakota* has argued for a stay on implementation of the standard due to its concerns over the standard's language on monitoring.

EPA in briefing over the SO₂ standard has defended the rule's language on monitoring, saying it is not a final agency action subject to judicial review. The agency used the same arguments in its recent decision to reject industry petitions filed with EPA seeking administrative reconsideration of the SO₂ standard.

In a Jan. 26 decision, EPA denied petitions for reconsideration filed by the National Environmental Development Association's Clean Air Project, an industry umbrella group, the Montana Sulphur and Chemical Company and ASARCO. The petitioners in mid-March filed lawsuits challenging the denials.

The petitioners largely focused their reconsideration request on language in the SO₂ rule they say effectively mandates states to use modeling rather than monitoring data in making attainment recommendations.

Focus On Preamble

EPA notes that the petitions focus on the agency's "non-binding preamble discussion providing guidance regarding expected approaches for future implementation of the revised SO₂ primary NAAQS, which they claim should not have been presented without first having undergone notice and comment procedures."

But EPA in the denial says its preamble is non-final non-binding guidance regarding future implementation of the standard and "plainly stated" in the rule that the agency's approach could "continue to evolve" as it develops further guidance. "EPA has not yet taken a final action that could be 'reconsidered'," EPA says.

The agency also says that even if the language was considered relevant to the standard, it would still deny the petitioners' claims that EPA should have included its modeling language in the proposed version of the rule. "Although the [proposal] did not specifically address the modeling based approach to implementation discussed in the preamble to the final rule, it has long been EPA's practice in implementing the prior SO₂ primary NAAQS to rely upon both modeling and monitoring to determine whether areas have attained the NAAQS," EPA says.

The petitioners "must necessarily wait for final agency action to challenge whatever implementation approaches EPA eventually adopts when making designations" under the NAAQS, the agency adds. EPA also says whatever approach it settles on will be consistent with governing statutory and regulatory provisions.

The several new lawsuits filed in mid-March challenging the agency's denials of the petitions for reconsideration have already been consolidated into a single case, and could further be consolidated with the existing state and industry lawsuit *Montana Sulphur & Chemical Company* challenging the SO₂ standard. That case has been held in abeyance until April 14 pending EPA's decision on the administrative petitions, and to allow time for appeals against the agency's subsequent decision to deny the petitions. -- *Bobby McMahon & Stuart Parker*